


# Four Year WUE Comprehensive Review Recycling and Desalination Water Use Efficiency

California Bay-Delta Authority  
August 2004



# Agenda

- Background
  - Review data and process
  - Update information
  - Questions and Discussion
  - Next Steps
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# Purpose of Workshop

Review work to date, discuss issues  
and establish next steps

Working session



# Comprehensive Review Components

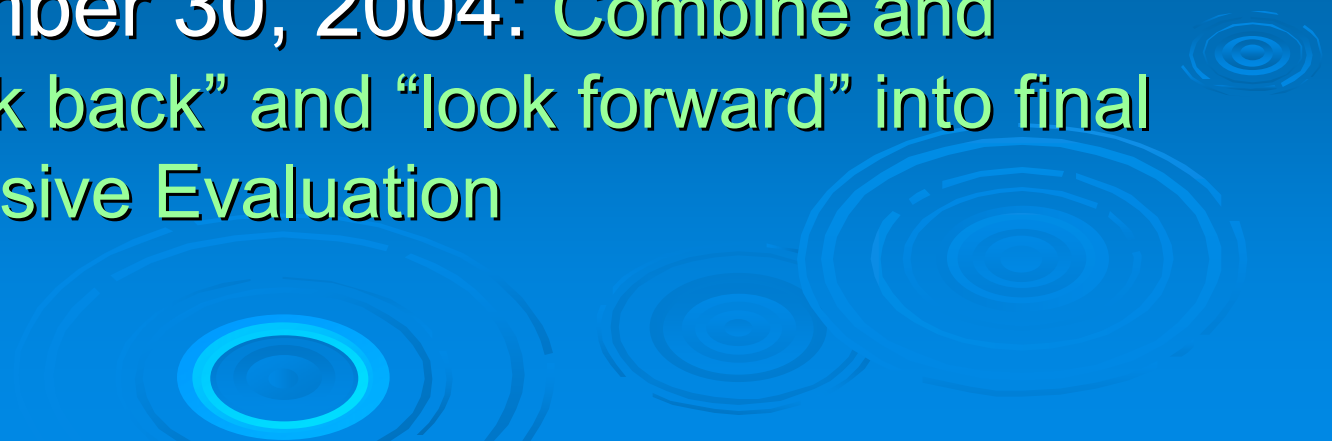
- ✓ Agricultural Water Use Efficiency
  - ✓ Urban Water Use Efficiency
  - ✓ Desalination
  - ✓ Recycling
- } 5 Investment Levels

Look Back at Past Activities

Projection of Potential

Synthesis

# Milestones

- By August 31, 2004: Complete “look-forward” projections for agricultural and urban water use efficiency, desalination and recycling
  - By October 1, 2004: Complete “look-back” assessment for agricultural and urban water use efficiency, desalination and recycling
  - By November 30, 2004: Combine and finalize “look back” and “look forward” into final Comprehensive Evaluation
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# Who's Using the Information

- ❖ Four Year CALFED WUE Checkup
- ❖ Common Assumptions for Surface Storage Investigations
- ❖ Water Plan Bulletin 160 update



# Recycling Desalination Approach

- Collect and integrate available data
- Create comprehensive list of recycling and desalination projects by geographic location
- Stakeholder and Agency review
- Determine “reasonable brackets” for recycling and desalination projections
- **Distinct from ag and urban WUE**

# Ag/Urban Projection Levels

Description of Analysis	Funding
<b>1. REASONABLY FORESEEABLE:</b> Current trend of investment for locally cost effective practices, state investment in non-locally cost effective practices.	\$30m/ yr for 2003-6 (3 yrs: Prop 50)
<b>2. LOCALLY COST EFFECTIVE PRACTICES:</b> Full implementation of locally cost effective practices and state investment in non locally cost effective practices.	\$30m/ yr for 2003-6 (3 yrs: Prop 50)
<b>3. MODERATE INVESTMENT:</b> Current trend of investment for locally cost effective practices, state investment in non-locally cost effective practices.	\$30m/ yr through 2030
<b>4. LOCALLY COST EFFECTIVE PRACTICES with MODERATE INVESTMENT:</b> Full implementation of locally cost effective practices and state investment in non locally cost effective practices.	\$30m/ yr through 2030
<b>5. LOCALLY COST EFFECTIVE PRACTICES with ROD FUNDING LEVELS:</b> Full implementation of locally cost effective practices and state investment in non locally cost effective practices.	\$80m/ yrs. 1-10, \$20m/yrs through 2030
<b>6. TECHNICAL POTENTIAL:</b> Full implementation of all WUE practices.	funding not constrained
<b>ADDITIONAL PROJECTION: REGULATED DEFICIT IRRIGATION:</b> Full implementation of technology and management to achieve regulated deficit irrigation.	agricultural only - funding not constrained




# Our Objectives

- Determine “reasonable brackets” for recycling and desalination projections
  - e.g. surface investigations must define a “reasonably foreseeable future no-action baseline”
- Incorporate findings into modeling approach and assumptions

# Geographic Scope

- Statewide
- Hydrologic Region
- Emphasis on South Coast and Bay Area

# Agency/Stakeholder Participation

- Identify duplicate entries
  - Update listed projects
  - Add new projects
  - Define implementation rate
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# Data and Information



# Project Categories

Currently Operating



Existing Projects

Planned/Funded  
Proposed  
Projected



Reasonable Brackets  
to be Developed



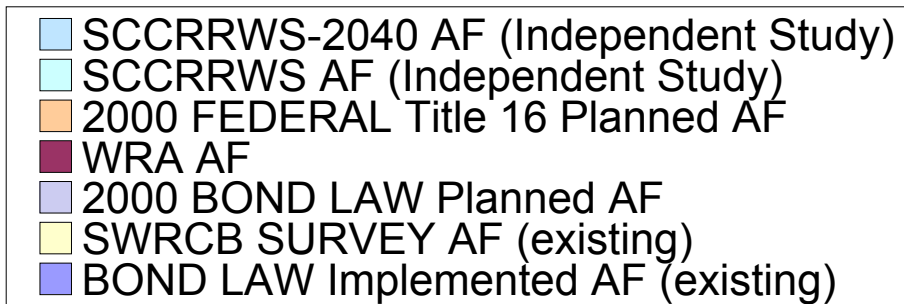
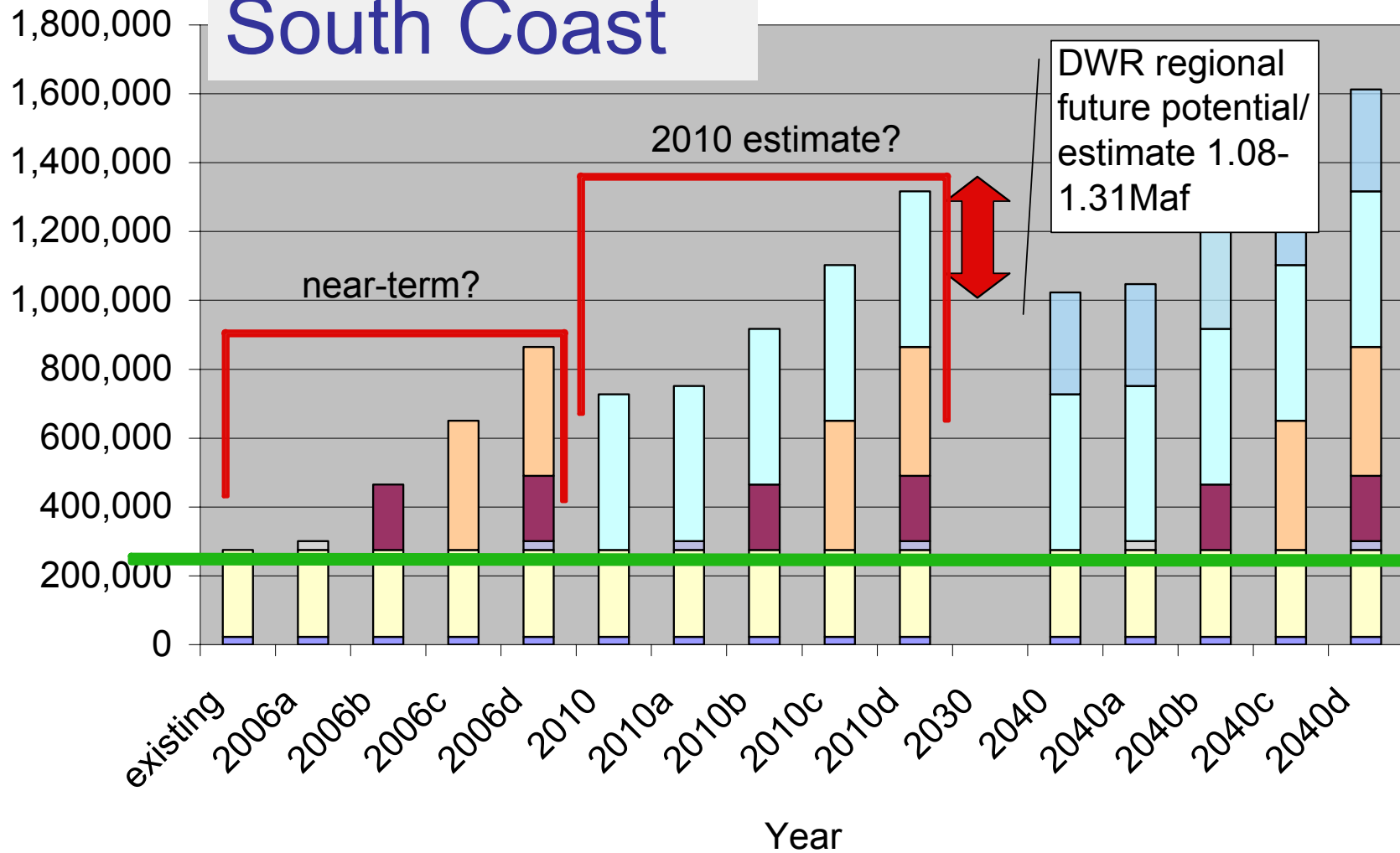
# Existing Recycling



# Future Project Information

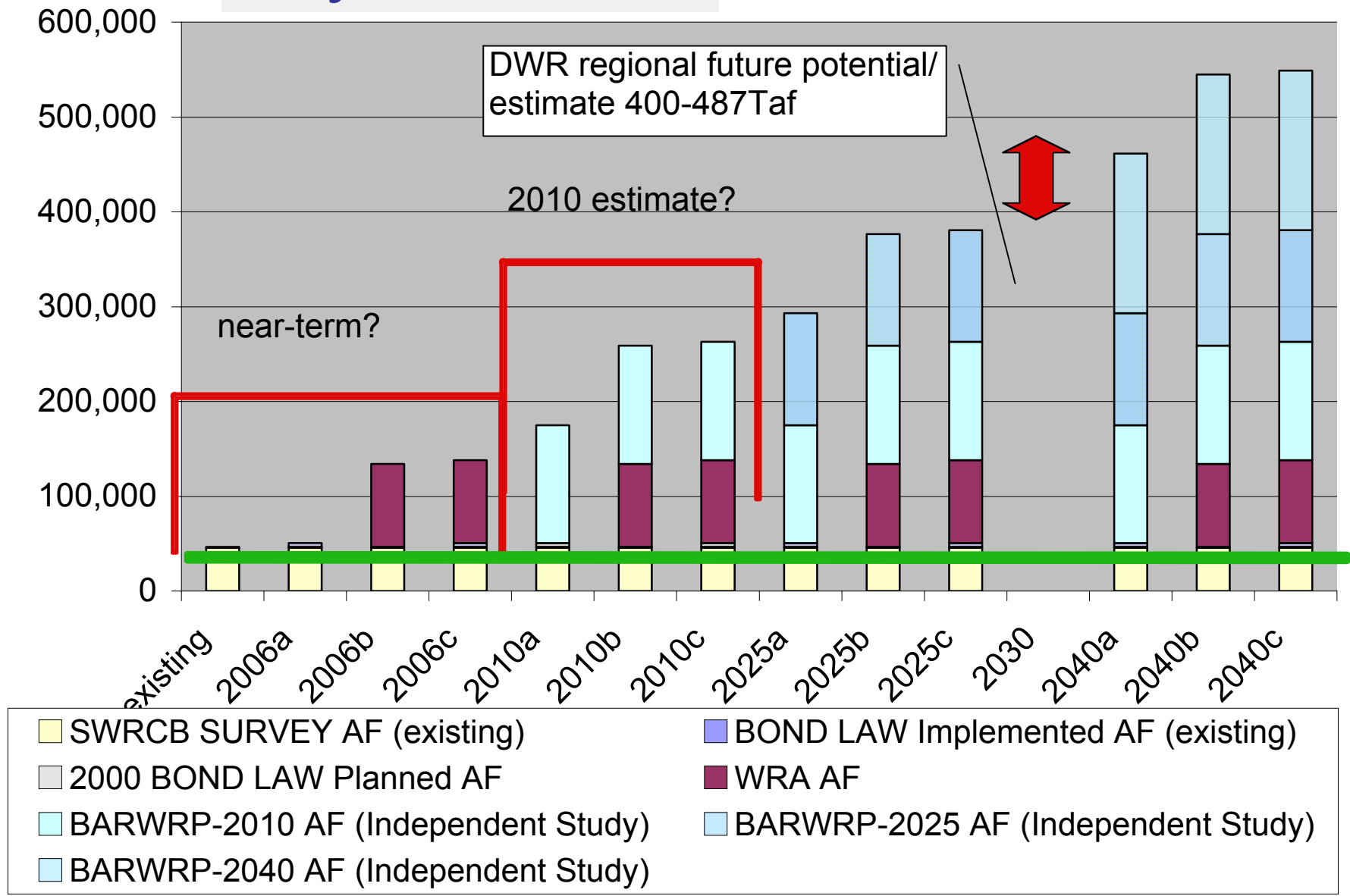
<u>Source</u>	<u>Date</u>
BARWRP Recycled Water Master Plan	1999
SCCWRRS Phase II Executive Summary	2002
SWRCB Revolving Fund Priority List	2001?
Bond Law	2000
Water Reuse Association (WRA)	2003
Proposition 13	2001-2002
Bond Loan/DWR Recycling Task Force	2001
Federal Title XVI	Not Available

# South Coast

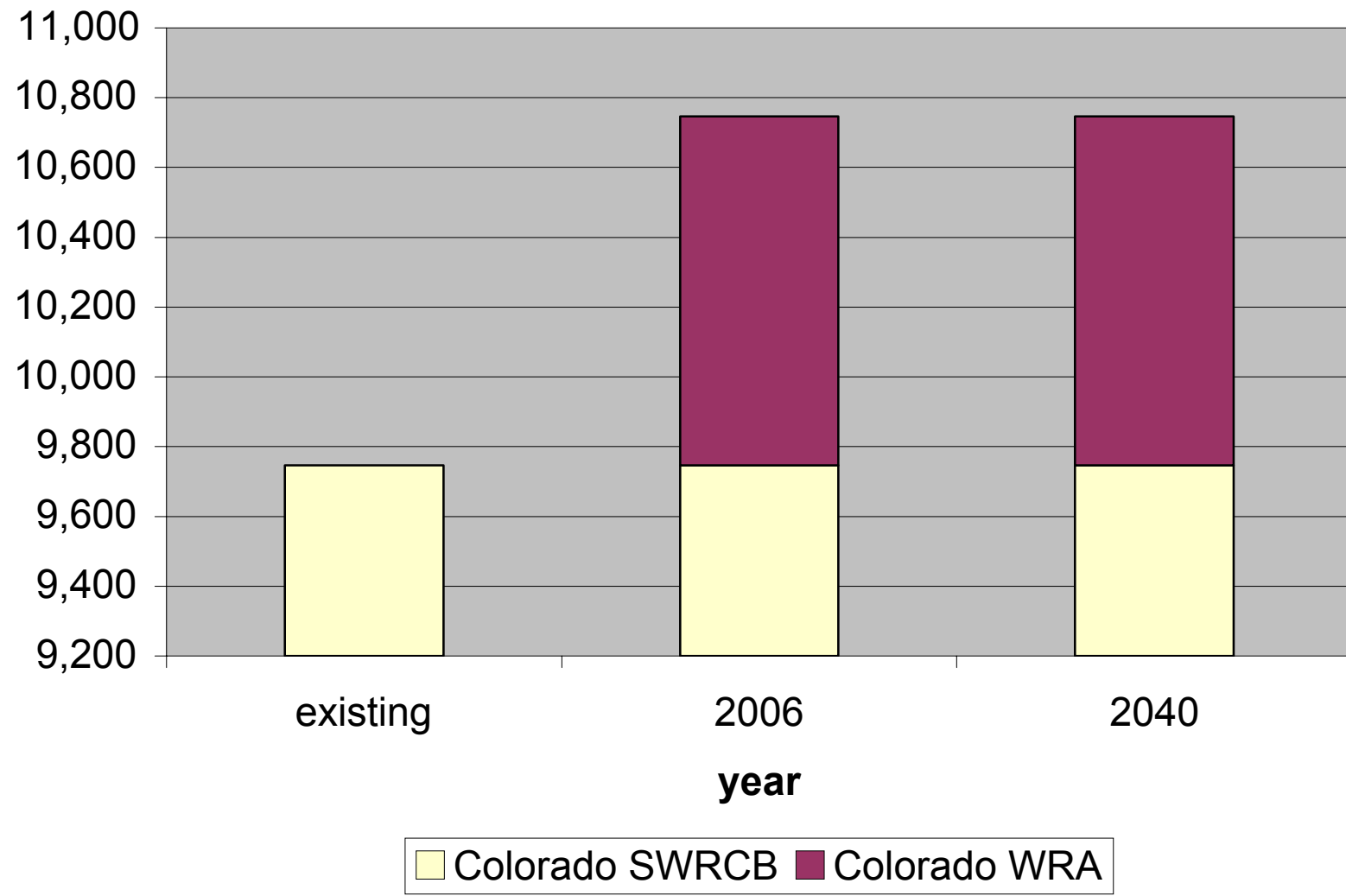




# Bay Area



# Colorado River



# Requested Information

## Project Identification

Project Agency  
Project Description  
County  
Hydrologic Region

## Project Details

Operational Status  
Recycling\*  
Total Capital Cost  
Annual O&M Cost  
Funding Sources  
Build Out Yield  
Build Out Year

# Future Project Information

## Source

California Coastal Commission

California Coastal Commission

California Coastal Commission

Metropolitan Water District

Metropolitan Water District

West Basin Municipal Water District

Western Groundwater

California Energy Commission

Monterey Bay National Marine Sanctuary

Civil Engineering

## Date

July 2002

August 2003

March 2004

2002

May 2004

May 2003

Jan/Feb 2003

May 2004

May 2004

February 2004

# Requested Information

## Project Identification

Project  
City/Location  
County  
Sponsor/Agency  
Hydrologic Region

## Project Details

Source Water  
Funding Sources  
Total Capital Cost  
O&M Cost  
Unit Cost  
Operational Status  
Build Out Year  
Build Out Yield

# Next Steps

- Obtain stakeholder review and comments
- New categories
- Present final results to WUE PAC
- Final Report